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WHEREAS Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”) has, concurrently with the lodging of this Consent Decree, filed a Complaint in this action alleging that Shintech Incorporated and/or K-Bin Inc., (collectively “Defendants”), violated the Clean Air Act (“CAA”), 42 U.S.C. §§ 7401 *et seq*; the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901 *et seq*; the Clean Water Act (“CWA”), 33 U.S.C. §§ 1251 *et seq*; and the Emergency Planning and Community Right-to-Know Act (“EPCRA”), 42 U.S.C. §§ 11001 *et seq*.

WHEREAS Shintech Incorporated (“Shintech”) is a Delaware corporation authorized to do business in the State of Texas. Shintech owns and operates a facility at 5618 Highway 332 East, Freeport, Texas (the “Shintech Facility”) that consists of three polyvinyl chloride (“PVC”) plants.

WHEREAS K-Bin Inc. (“K-BIN”), a wholly owned subsidiary of Shintech, is incorporated in Delaware, and is authorized to do business in the State of Texas. K-BIN owns and operates a facility at 5616 Highway 332 East, Freeport, Texas (the “K-BIN Facility”), which converts PVC resin into PVC compound.

WHEREAS the Complaint against Defendants alleges that Defendants failed to comply with the national chlorofluorocarbon recycling and reduction program requirements of Section 608 of the CAA, 42 U.S.C. § 7671g; that Shintech violated applicable generator standards and operated without a RCRA permit in violation of the regulations promulgated pursuant to Sections 3002, 3004, and 3005 of RCRA, 42 U.S.C. §§ 6922, 6924, and 6925; that Shintech failed to comply with the reporting requirements promulgated pursuant to Section 313

of EPCRA, 42 U.S.C. § 11023; and Shintech discharged pollutants into waters of the United States in violation of Section 301 of the CWA, 33 U.S.C. § 1311.

WHEREAS the EPA, Region 6, conducted a Multi-Media Compliance Inspection (“Inspection”) at the Shintech Facility during the months of July and August 2004, to determine compliance with the CAA, RCRA, CWA, and EPCRA, as well as the federal and State implementing regulations. In addition, EPA issued to Shintech an information request (“Request”) pursuant to the CAA. As a result of the Inspection and the response to the Request, EPA identified violations of the applicable environmental statutes and implementing regulations.

WHEREAS the Parties agree that Shintech, as evidenced by Shintech’s Texas Pollutant Discharge Elimination System (“TPDES”) Permit (Permit No. WQ0004818000), which was issued on July 19, 2007, is currently operating under a TPDES Permit.

WHEREAS the Parties agree that Shintech by its submittal of August 5, 2008, did certify that hazardous waste determinations, pursuant to 30 Texas Administrative Code (“TEX.ADMIN.CODE”) § 335.62 and 40 C.F.R. § 262.11(c), were made for all inlets to Surface Impoundment I; that there was no evidence of hazardous waste associated with Surface Impoundment I; that Surface Impoundment I is covered by Shintech’s TPDES Permit; that Shintech’s use of Surface Impoundment I is solely for non-hazardous process water; and that through monitoring, Shintech will ensure that there is no discharge of hazardous waste to Surface Impoundment I.

WHEREAS Defendants do not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint.

WHEREAS the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### **I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Section 3008(a)(1) of RCRA, 42 U.S.C. § 6928(a)(1); Sections 309(b) and (d) of the CWA, 33 U.S.C. §§ 1319(b) and (d); and Section 325(c)(4) of EPCRA, 42 U.S.C. § 11045(c)(4). The Court has jurisdiction over the parties to this action. Venue lies in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Section 3008(a) of RCRA, 42 U.S.C. § 6928(a); Section 309(b) of the CWA, 33 U.S.C. § 1319(b); Section 325(c)(4) of EPCRA, 42 U.S.C. § 11045(c)(4); and 28 U.S.C. §§ 1391(b) and (c) and 1395(a). For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendants consent to the Court's jurisdiction over this Consent Decree and any such action and over Defendants and to venue in this judicial district.

2. For purposes of this Consent Decree, Defendants agree that the Complaint

states claims upon which relief may be granted pursuant to Section 608 of the CAA, 42 U.S.C. § 7671g; Sections 3002, 3004, and 3005 of RCRA, 42 U.S.C. §§ 6922, 6924, and 6925; Section 301 of the CWA, 33 U.S.C. § 1311; and Section 313 of EPCRA, 42 U.S.C. § 11023.

## **II. APPLICABILITY**

3. The obligations of this Consent Decree apply to and are binding upon the United States and upon Defendants and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the Shintech Facility or the K-BIN Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendants of their obligation to ensure that the terms of the Decree are implemented. At least 30 Days prior to such transfer, Defendants shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 6, and the United States Department of Justice, in accordance with Section XIV (Notices) of this Consent Decree. Any attempt to transfer ownership or operation of either the Shintech Facility or the K-BIN Facility without complying with this Paragraph constitutes a violation of this Consent Decree.

5. Defendants shall provide a copy of any relevant portion(s) of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree. Defendants shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Defendants shall not raise as defense the failure by any of their officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

### **III. DEFINITIONS**

7. Terms used in this Consent Decree that are defined in the CAA, RCRA, EPCRA, and CWA (collectively “the Acts”) or in the Federal or State regulations implementing the Acts shall have the meanings assigned to them in the Acts or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. “Combined Facility” shall mean the Shintech Facility and the K-BIN Facility, collectively.
- b. “Complaint” shall mean the complaint filed by the United States in this action;
- c. “Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto (which are listed in Section XXIII);
- d. “Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;
- e. “Defendants” shall mean Shintech Incorporated and K-Bin Inc., jointly;



- f. “EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;
- g. “Effective Date” shall have the definition provided in Section XV of this Consent Decree.
- h. “Paragraph” shall mean a portion of this Decree identified by an arabic numeral;
- i. “Parties” shall mean the United States and Defendants;
- j. “Section” shall mean a portion of this Decree identified by a roman numeral;
- k. “State” shall mean the State of Texas; and
- l. “United States” shall mean the United States of America, acting on behalf of EPA.

#### **IV. CIVIL PENALTY**

8. Within five (5) business days after Shintech receives notice that this Consent Decree has been lodged with the Court, Shintech shall deposit the amount of \$2,585,004 into an escrow account bearing interest on commercially reasonable terms, in a federally chartered bank (the “Escrow Account”). Such monies shall remain in escrow until entry of the Decree. If the Decree is not entered by the District Court, and the time for any appeal of that decision has run, or if the District Court’s denial of entry is upheld on appeal, the monies placed in escrow, together with accrued interest thereon, shall be returned to Shintech. If the Decree is entered by the District Court, Shintech shall, within 15 Days thereof, cause the monies (including

all accrued interest) in the Escrow Account to be released and disbursed to the United States in payment of the civil penalty under this Decree.

9. Defendants shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to Defendant, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Texas, 919 Milam Street, Houston, Texas 77208, (713) 567-9000. At the time of payment, Defendants shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Shintech Incorporated and K-Bin Inc.*, and shall reference the civil action number and DOJ case number 90-5-2-1-08745/1, to the United States in accordance with Section XIV of this Decree (Notices); by email to [acctsreceivable.CINWD@epa.gov](mailto:acctsreceivable.CINWD@epa.gov); and by mail to:

EPA Cincinnati Finance Office  
26 Martin Luther King Drive  
Cincinnati, Ohio 45268

10. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal income tax.

## **V. COMPLIANCE REQUIREMENTS**

### **A. Clean Air Act – Protection of Stratospheric Ozone**

11. In their first annual report due under Section VII (Reporting Requirements) of this Consent Decree, Defendants shall certify that they are in full compliance with the requirements of 40 C.F.R. Part 82, Subpart F - Recycling and Emissions Reduction (including without limitation, certification requirements; leak testing, repair, and verification

requirements; and record-keeping requirements) governing the use of Ozone Depleting Substances ("ODS") or certify in what respects Defendants are not in compliance.

12. Refrigerant Management Audits. Defendants shall retain a third-party auditor to conduct a facility-wide Refrigerant Management Audit ("RMA") at the Combined Facility annually for three years, as set forth in this Paragraph, to ensure compliance with all applicable requirements set forth in 40 C.F.R. Part 82, Subpart F. Each RMA shall be based on and include the following information:

- a. for the first annual RMA, a review of all information relating to Defendants' compliance on and after June 1, 2008, with 40 C.F.R. Part 82, Subpart F, and for the second and third annual RMAs, a review of all information relating to Defendants' compliance during the twelve (12) months following the end of the period covered by the previous RMA;
- b. a verification inventory of the industrial process refrigeration equipment, as defined at 40 C.F.R. § 82.152;
- c. an evaluation of the leak repair and verification program (including verification that repairs were made and that technicians are always certified);
- d. an identification, based on ultrasonic or hand-held devices, of leaking industrial process refrigeration equipment; and
- e. a review of the record-keeping and reporting program, including records that track ODS from purchase to reclamation and/or destruction.

13. Refrigerant Management Audit Reporting Schedule.

- a. The first RMA shall be completed at the Combined Facility no

later than June 1, 2009. The two subsequent RMAs shall be completed by June 1, 2010, and June 1, 2011, respectively.

b. The first RMA report shall be submitted for EPA's information by September 30, 2009, and the two subsequent reports shall be submitted to EPA by September 30, 2010, and September 30, 2011, respectively. The RMA reports shall include the results of the RMA and disclose all areas of non-compliance. The RMA reports shall also include a schedule for actions to be implemented, which shall correct any identified non-compliance as soon as practicable and shall prevent, to the extent practicable, a recurrence of the cause of such non-compliance.

14. Retire and Replace Refrigeration Equipment.

a. Defendants shall retire and replace the industrial process refrigeration equipment identified by Defendants as RF-1161B and RF-4161 no later than June 1, 2009; RF-5161 and RF-1161A no later than June 1, 2010; and RF-3161 and RF-6161 no later than June 1, 2011, in accordance with all applicable laws and regulations. Replacement units shall use non-ODS refrigerant.

b. When Defendants retire each industrial process refrigeration equipment listed in Subparagraph a of this Paragraph, Defendants shall, in accordance with all applicable laws and regulations, (1) recycle or dispose of all durable components of the equipment; (2) recycle and/or destroy all ODS-containing foam insulation; and (3) send all ODS-containing refrigerant from retired equipment for destruction in accordance with 40 C.F.R. § 82.104(h), or for reclamation (as defined in 40 C.F.R. § 82.152), by a certified reclaimer (as defined in 40 C.F.R. § 82.164).

15. Refrigerant Management Compliance Plan. By no later than ninety (90) days after the Effective Date of this Consent Decree, Defendants shall develop and implement a Refrigerant Management Compliance Plan ("RMCP") for the Combined Facility. The RMCP shall include the following elements:

a. Refrigerant Manager. Defendants shall designate one Refrigerant Manager for the Combined Facility. This Refrigerant Manager shall oversee the development and implementation of the RMCP;

b. Annual Internal Refrigerant Management Audit. Defendants shall develop a protocol for the performance of an annual internal refrigerant management audit, which shall be performed at least once each calendar year;

c. Standard Operating Procedures. Defendants shall develop standard operating procedures ("SOPs") for each of the elements listed in this Paragraph and for the requirements of 40 C.F.R. Part 82, Subpart F. Defendants shall furnish or instruct contractors as to the requirements of the SOPs, where applicable to the contractors' duties;

d. Training Program. For all employees that service, maintain, or repair refrigeration equipment, Defendants shall develop a training program, which shall include each of the elements listed in this Paragraph and all the requirements of 40 C.F.R. Part 82, Subpart F. By December 31, 2008, Defendants shall certify to EPA that all employees described in this Subparagraph have completed the training program;

e. Equipment Inventory. Defendants' Refrigerant Manager shall maintain an inventory of all industrial process refrigeration equipment that is in use or is available for use. The inventory shall include the following information:

- (1) the location of each piece of industrial process refrigeration equipment;
- (2) the specific identification number or other designator for such equipment (*e.g.*, serial number);
- (3) the type of refrigerant in each piece of equipment; and
- (4) the quantity of refrigerant each piece of equipment is estimated to hold when at full charge, as defined by 40 C.F.R. § 82.152.

f. Inventory and Tracking of Refrigerant. Defendants shall maintain an inventory of all refrigerant (“ODS and non-ODS”) from its arrival to disposal, including use and recycling. Defendants shall weigh and document the amount of refrigerant contained in each cylinder upon receipt of the cylinder and each time refrigerant is added to or taken from the cylinder. Defendant shall characterize the amount of refrigerant charged to each appliance and recovered from each appliance for recycling, disposal, or reuse. Defendants shall reconcile their purchase and use of refrigerant annually.

g. Maintenance of Technician’s Records. With respect to any maintenance, servicing, or repair of appliances at the Combined Facility, Defendants’ Refrigerant Manager shall ensure that records are prepared and maintained, in either electronic or hard copy, that document the:

- (1) identification of the equipment serviced;
- (2) identification of the specific leak locations and components that are leaking (*e.g.*, gaskets, seals, joints, valves, tubing, coils, or condensers);



(3) amount and type of refrigerant added to the equipment, if any;

(4) leak rate calculations for any identified leaks as determined in accordance with 40 C.F.R. § 82.152 (definition of “leak rate”);

(5) type of repair, if any, performed;

(6) equipment using a Class I or Class II ODS, initial repair verification and type of verification test used; and

(7) equipment using a Class I or Class II ODS, follow-up repair verification (no sooner than fourteen (14) Days after the initial repair) and type of verification test used.

h. Certifications. Defendants’ Refrigerant Manager shall keep on file in either electronic or hard copy format a copy of the “EPA Section 608 Certification” for all employees or contractor technicians working on ODS-containing industrial process refrigeration equipment at the Combined Facility. Defendants shall employ only employees and contractor technicians with the proper type of EPA Certification (“Certified Technicians”) to service ODS-containing industrial process refrigeration equipment.

i. Operating and Maintenance Practices. Defendants shall comply with the following Best Management Practices at the Combined Facility:

(1) Except as authorized by 40 C.F.R. § 82.154(a)(2), no refrigerant shall knowingly be vented or released to the atmosphere;

(2) ODS-containing refrigerant shall be purchased, sold,

recovered, reclaimed, reused, transferred, managed, and/or destroyed in accordance with 40 C.F.R. Part 82 and the RMCP;

(3) Leak testing for ODS refrigerant shall be performed using an ultra-sonic or hand-held device;

(4) If a leak of an ODS-refrigerant from any industrial process refrigeration equipment at the Combined Facility is identified or suspected (as evidenced, for example, by the need to add refrigerant), the leak rate shall be calculated in accordance with 40 C.F.R. § 82.152 (definition of “leak rate”), and repairs shall be made, and verified according to Subparagraph j.

j. Leak Repairs and Follow-Up Verification. All leaks repairs, verifications, and notifications to EPA regarding industrial process refrigeration equipment containing ODS shall be made as required by 40 C.F.R. § 82.156.

k. Additional Reporting. Within ninety (90) Days after the Effective Date of this Consent Decree and continuing on a semi-annual basis for three (3) years, Defendants shall submit, for EPA’s information, copies of the following reports and documents: (1) copies of Defendants’ operator logs of refrigerant added to each industrial process refrigeration unit (identified as the “unit ledger” by Defendants); (2) copies of the results of its leak rate calculations for each industrial process refrigeration unit; and (3) a summary of the status of each industrial process refrigeration unit including the dates of leak repair, initial verification testing, and follow-up verification testing; the dates of any notifications made to



EPA, including submittal of a retrofit and retirement plan; and if applicable, the projected date of retrofit and retirement.

1. Annual Reporting. As part of Section VII (Reporting Requirements), Defendants shall submit, for EPA's information, a list of units that have been replaced pursuant to the requirements of Paragraph 14 (Retire and Replace Refrigeration Equipment). In the event that EPA notification is required under 40 C.F.R. § 82.156, notification shall be submitted to EPA in accordance with Paragraph XIV (Notice).

B. Resource Conservation and Recovery Act ("RCRA")

Hazardous Waste Identification

16. Shintech shall perform the activities set out below to ensure that all hazardous waste streams at the Shintech Facility have been properly identified and documented as required pursuant to 30 TEX.ADMIN.CODE Chapter 335 and 40 C.F.R. Part 262.

a. By no later than ninety (90) days after the Effective Date of this Consent Decree, Shintech shall submit, for EPA's information, a plan that will demonstrate how Shintech will track all solid waste streams at its facility (the "RCRA Tracking Plan"). The RCRA Tracking Plan shall include procedures to accomplish the following:

- (1) identify each hazardous waste stream and each hazardous waste generated at the Shintech Facility and state whether the hazardous waste determination was made using analytical data or process knowledge;
- (2) identify all applicable hazardous waste numbers, for example, D001, D002, etc., that apply to each individual hazardous waste stream;

(3) identify each new solid waste stream generated at the Shintech Facility by making a hazardous waste determination and including the results of such hazardous waste determinations as part of the reports required by Section VII (Reporting Requirements) of this Consent Decree; and

(4) maintain all documentation of all hazardous waste determinations as required by 30 TEX.ADMIN.CODE Chapter 335 and 40 C.F.R. Part 262, including, but not limited to, documenting hazardous waste determinations using process knowledge.

b. By no later than 180 days after the Effective Date of this Consent Decree, Shintech shall fully implement the RCRA Tracking Plan. In its second annual report due under Section VII (Reporting Requirements) of this Consent Decree, Shintech shall certify to EPA in writing that the RCRA Tracking Plan has been fully implemented and Shintech is in full compliance with the RCRA Tracking Plan, 30 TEX.ADMIN.CODE Chapter 335, and 40 C.F.R. Part 262, or certify in what respect the RCRA Tracking Plan has not been fully implemented and complied with or in what respects Shintech is not in full compliance with 30 TEX.ADMIN.CODE Chapter 335 and 40 C.F.R. Part 262.

#### Third-Party Audit

17. Shintech shall retain a third party to conduct a RCRA Audit at its facility to determine Shintech's compliance with its statutory and regulatory management requirements of hazardous waste, including without limitation with the hazardous waste determination requirements of 30 TEX.ADMIN.CODE, Chapter 335, 40 C.F.R. Part 262, and Paragraph 16 of this Consent Decree.

18. Shintech shall complete the RCRA Audit at its facility by no later than September 1, 2009.

19. As part of the second annual report due no later than 30 Days after the end of calendar-year 2009, under the Reporting Requirements (Section VII) of this Consent Decree, Shintech shall submit a written report with the RCRA Audit findings for the Shintech Facility, including a proposed plan and schedule for correcting deficiencies at the Shintech Facility.

20. EPA shall have the opportunity to comment on the proposed plan and schedule for correcting deficiencies; provided, however, that any comments shall be submitted to Shintech for consideration by no later than sixty (60) Days after receipt of Shintech's proposed plan and schedule. Shintech shall revise the proposed plan to incorporate EPA's comments to the extent necessary and appropriate and resubmit the revised plan to EPA within sixty (60) days after receipt of EPA's comments for EPA's review and approval.

21. By no later than the third annual report due no later than 30 Days after the end of calendar-year 2010, under the Reporting Requirements (Section VII) of this Consent Decree, Shintech shall submit a written report certifying that all deficiencies identified by the RCRA Audit have been corrected in accordance with the approved plan.

Potential for Offsite Migration

22. Shintech shall determine the potential for offsite migration of contaminants in accordance with Paragraphs 23 through 24.

23. Site History Report.

a. By no later than sixty (60) days after the closure of Surface

Impoundment II in accordance with Paragraph 28 of this Consent Decree but in no event later than June 30, 2011 (the "Site History Report Due Date"), Shintech shall prepare and maintain a Site History Report for the Shintech Facility. The Site History Report shall contain the following information:

(1) a summary of any prior known use of the property that could indicate the potential for offsite migration from the Old Drying Bed and/or Surface Impoundment II (including, but not limited to, information regarding prior manufacturing processes, operating units, waste disposal or other information that could indicate subsurface contamination caused by migration from the Old Drying Bed and/or Surface Impoundment II); and

(2) descriptions of the site's topography and surrounding area receptors.

b. In the event that information described in Subparagraph 23.a. is already compiled in an investigation report (e.g., RCRA Facility Investigation Report, Affected Property Annual Report, etc.) and the investigation report still accurately reflects site conditions, such investigation report shall satisfy the requirement to develop a Site History Report; Shintech by no later than June 1, 2011, shall submit to the EPA, for review and comment, such investigation report that meets the requirements of this Subparagraph.

24. Hydrogeology Study and Report.

a. If the Site History Report for the Shintech Facility indicates the

potential for offsite migration of contamination from the Old Drying Bed and/or Surface Impoundment II, Shintech, by no later than six (6) months after June 30, 2011, shall perform a Hydrogeology Study to quantify the potential for this offsite migration of contamination. The primary objective of the Hydrogeology Study is to detect the nature and extent of any contamination and risk of migration from the Old Drying Bed and/or Surface Impoundment II.

b. In the event that information described in Subparagraph a. of this Paragraph is already compiled in an investigation report (*e.g.*, RCRA Facility Investigation Report, Affected Property Assessment Report, Site Investigation Report, etc.) that still accurately reflects the potential for offsite migration of contamination, such investigation report shall satisfy the requirement to undertake a Hydrogeology Study. No later than six (6) months after June 30, 2011, Shintech shall submit to the EPA, for review and comment, such investigation report that meets the requirements of this Subparagraph b.

c. If no such investigation report exists, then Shintech must complete a Hydrogeology Study and by no later than eight (8) months after June 30, 2011, Shintech shall prepare and maintain a written Hydrogeology Report summarizing the findings from the Hydrogeology Study.

25. Groundwater Monitoring. If the Hydrogeology Study determines that there is offsite migration or the potential for offsite migration of contamination from the Old Drying Bed and/or Surface Impoundment II, Shintech, by no later than eight (8) months after June 30, 2011, shall develop and implement a Groundwater Monitoring Program. The Groundwater Monitoring Program shall include but is not limited to the installation of groundwater monitoring wells at locations and depths determined as appropriate from the



Hydrogeology Report or other appropriate investigative reports. Shintech shall also mitigate and/or remediate any release from the Old Drying Bed and/or Surface Impoundment II in accordance with the Texas Risk Reduction Program ("TRRP"), as codified at 30 TEX.ADMIN.CODE Chapter 350. If a Groundwater Monitoring Program is implemented, Shintech shall submit a written report certifying its completion of the groundwater monitoring requirements described in this Paragraph 25 by no later than the fifth annual report due 30 Days after the end of the calendar-year 2012, under Section VII (Reporting Requirements) of this Consent Decree, following implementation of the Groundwater Monitoring program.

Compliance Program Requirements for Surface Impoundment II and the Drying Beds<sup>1</sup>

26. New Drying Bed. Within five (5) business days after Shintech receives notice that this Consent Decree has been lodged with the Court, Shintech shall immediately cease to use the New Drying Bed for the disposal of hazardous waste; and by no later than the date on which the Consent Decree is entered by the Court, Shintech shall remove all materials from the New Drying Bed, and in accordance with the applicable State law and RCRA, make a hazardous waste determination, and dispose of the hazardous waste. By no later than the first annual report due thirty (30) Days after the end of calendar-year 2008, under Section VII (Reporting Requirements) of this Consent Decree, Shintech shall submit a written report certifying its compliance with the requirements described in this Paragraph 26.

27. Old Drying Bed - Closure. Within five (5) business days after Shintech

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<sup>1</sup> See Appendix D, Site Plan for the Shintech Facility, which illustrates the locations of the Drying Beds and Surface Impoundments.

receives notice that this Consent Decree has been lodged with the Court, Shintech shall immediately cease the use of the Old Drying Bed for the disposal of hazardous waste. By no later than December 30, 2008, Shintech shall close the Old Drying Bed in accordance with the TRRP. By no later than the first annual report due thirty (30) Days after the end of calendar-year 2008, under Section VII (Reporting Requirements) of this Consent Decree, Shintech shall submit a written report certifying its compliance with the requirements described in this Paragraph.

28. Surface Impoundment II. Within five (5) business days after Shintech receives notice that this Consent Decree has been lodged with the Court, Shintech shall immediately cease to use the Surface Impoundment II for the disposal, treatment, and/or storage of hazardous waste. Shintech shall by no later than December 31, 2008, investigate Surface Impoundment II for the presence of "hazardous waste" as that term is defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), and by no later than September 30, 2010, close Surface Impoundment II to protective concentration levels as required under the TRRP. By no later than the third annual report due thirty (30) Days after the end of calendar-year 2011, under Section VII (Reporting Requirements) of this Consent Decree, Shintech shall submit copies of its final plans and reports (i.e., Affected Property Assessment Report, Response Action Plan, Response Action Completion Report, Post Response Action Care Reports, etc.) pertaining to the actions taken, and any actions that will be taken, to address any environmental concerns at Surface Impoundment II and certify to the EPA Shintech's compliance with the requirements of this Paragraph and the TRRP.

29. Installation and Operation of the Waste Decomposition Tank. In order to reduce the risk of groundwater contamination and/or offsite migration of hazardous waste from

its facility, Shintech shall install and operate by no later than June 1, 2009, an aboveground tank that meets the definition of a "Tank" as defined at 30 TEX.ADMIN.CODE. § 335.1 and 40 C.F.R. § 260.10. Among other uses that are allowed under the state and federal environmental regulations, the Waste Decomposition Tank shall be used to accept leachate from the New Drying Bed.

30. Shintech shall summarize the actions taken under Paragraph 29 of this Consent Decree, as part of its second annual report due under Section VII (Reporting Requirements) of this Consent Decree. Additionally, the report shall include the environmental benefits gained and projected from the installation and operation of the Waste Decomposition Tank.

C. Environmental Management System

31. Shintech shall implement an Environmental Management System ("EMS") in accordance with the standard set out in Appendix A (the "EMS Standard").

32. Shintech shall conduct a gap analysis of the current EMS and/or environmental management practices at the Combined Facility by no later than September 30, 2008. The Gap Analysis shall show, *inter alia*, which elements of an EMS are currently being implemented and which need to be developed and implemented. No later than December 30, 2008, Shintech shall submit, for EPA's information, the Gap Analysis for the Combined Facility.

33. Shintech shall fully implement all aspects of the management system and procedures set out in the EMS Standard at the Combined Facility by no later than March 30, 2009.

34. Shintech shall collect and report data on the Environmental Metrics listed



in Paragraph 43 for the Combined Facility on an annual basis. Shintech shall submit, for EPA's information, these Environmental Metrics data as part of the reports submitted to EPA pursuant to Section VII (Reporting Requirements) of this Decree.

35. Shintech shall conduct a Third-Party EMS Audit ("EMS Audit") at the Combined Facility to assess whether an effective EMS has been implemented.

36. By no later than October 30, 2008, Shintech shall submit for EPA's information, an EMS Audit Plan for conducting the EMS Audit at the Combined Facility. The EMS Audit Plan shall include a schedule for conducting the EMS Audit and identify the Audit Team Leader and the EMS Audit Team members for each EMS Audit. The lead auditor shall not have had a substantive role in developing the EMS for the Combined Facility and shall be certified as an EMS lead auditor by the Registrar Accreditation Board Quality Society of Australia International or the Board of Environmental, Health, and Safety Auditor Certifications. In selecting the EMS Audit Team Members and the Audit Team Leader for each EMS Audit, Shintech shall satisfy the criteria set out in ISO 19011 (First edition, 2002-10-01) incorporated by reference and made enforceable under this Consent Decree. Each EMS Audit Team shall consist of a least two independent auditors; provided, however, the Audit Team shall be of a sufficient size to adequately cover the scope of the audit and the size and complexity of the Combined Facility. Shintech shall notify EPA of any changes from the schedule or changes in the identified EMS Audit Team members outlined in the EMS Audit Plan at least ten (10) Days before the commencement of the on-site portion of the EMS Audit.

37. EPA shall be allowed to send one representative to observe the EMS Audit. At least ten (10) Days prior to a scheduled EMS Audit, EPA shall provide Shintech with

the name of the individual who will observe the Audit.

38. The EMS Audit at the Combined Facility shall be completed between December 31, 2008, and December 31, 2009.

39. The EMS Audit shall provide for an evaluation of the adequacy of EMS implementation relative to the EMS Standards, from top management down, throughout each major organization unit at the Combined Facility and shall identify Areas of Concern. Each EMS Audit shall be conducted in a manner consistent with ISO 19011 (First edition, 2002-10-01). During each EMS Audit, each Audit Team shall assess Defendants' conformance with the requirements set out in the EMS Standards and shall determine the following:

- a. whether there is a defined system, subsystem, program, or planned task for the respective EMS element;
- b. to what extent the system, subsystem, program, or task has been implemented and is being maintained;
- c. the adequacy of each operation's internal self-assessment procedure for programs and tasks composing the EMS;
- d. whether Defendants are effectively communicating regulatory requirements to affected parts of the organization, contractors, and on-site service providers;
- e. whether further improvements should be made to the EMS to conform to the EMS Standards;
- f. whether there are observed deviations from Defendants' written requirements or procedures; and
- g. whether continual improvement is occurring.

40. Combined Facility EMS Audit Report. No later than sixty (60) Days following the completion of the EMS Audit, the EMS Team conducting such audit shall prepare an EMS Audit Report. The EMS Audit Report shall present the Audit Findings and shall contain the following information:

- a. the audit's scope, including the period of time covered by the audit;
- b. the date(s) the on-site portions of the audit were concluded;
- c. the identification of the regulatory agency representative (if any) observing the audit;
- d. the identification of the Audit Team members for the Combined Facility;
- e. the distribution for the Combined Facility's EMS Audit Report;
- f. a summary of the audit process, including any obstacles encountered;
- g. detailed audit findings, including the basis for each finding and each area of concern identified;
- h. identification of any audit findings corrected, or Areas of Concern addressed, during the audit and a description of the corrective measures and when they were implemented; and
- i. certification by the EMS Audit Team that the EMS Audit was conducted in accordance with the provisions set forth under this Consent Decree.

Shintech shall submit, for EPA's information, a copy of the EMS Audit Report due under

Section VII (Reporting Requirements) of this Consent Decree and due after the completion of the EMS Audit Report.

41. Follow-Up Corrective Measures: Combined Facility Audit Response and Action Plan. Shintech shall develop and submit, for EPA's information, its response to the EMS Audit Report (the "Combined Facility Audit Response and Action Plan"). The Combined Facility Response and Action Plan shall provide (1) a response to the findings and Areas of Concern identified in the EMS Audit Report and (2) an action plan for bringing the Combined Facility into full conformance with the EMS Standard and fully addressing all Areas of Concerns. The Combined Facility Audit Response and Action Plan shall include the results of any root-cause analysis, specific deliverables, responsibility assignments, and an implementation schedule for the identified actions and measures, including those that may have already been completed.

42. Certification of EMS Implementation. a. Within thirty (30) days after completion of the EMS Audit, if no instances of nonconformance with the EMS Standard were found at the Combined Facility, Shintech shall submit a Request for Certification of EMS Implementation to the EMS Auditor. Within ten (10) Days after receiving the certification request, the EMS Auditor shall issue to Defendants a Certification of EMS Implementation for Defendants' respective facilities, indicating that the EMS has been fully implemented and conforms to the EMS Standards.

b. Alternately, within ten (10) Days after completion of actions or measures identified in the Final Audit Response and Action Plan, Shintech shall submit to the EMS Auditor a Request for Certification of EMS Implementation.

c. As soon as practicable, but in no event later than thirty (30) Days after it

has received the certification request pursuant to Subparagraph b. of this Paragraph, the EMS Auditor shall, as necessary, re-inspect the Combined Facility (i.e., conduct a “Certification review”), and submit to the Defendants a written statement identifying those instances of nonconformance that have been addressed and any that have not, including an explanation describing the failure to address or correct, as appropriate, any instances of nonconformance. Defendants shall use their best efforts to address in a timely manner any outstanding instances of nonconformance identified during the Certification Review.

d. When the EMS Auditor concludes that all instances of nonconformance have been addressed at the Combined Facility, the EMS Auditor shall issue to Defendants a Certification of EMS Implementation for Defendants’ respective facilities, indicating that the EMS is fully implemented and conforms to the EMS Standards.

e. Within ten (10) Days of receipt, Defendants shall submit, for EPA’s information, a copy of each Certification of EMS Implementation.

43. Environmental Metrics Data. During the time period that the Consent Decree is in effect, Shintech shall submit, for EPA’s information, the collected environmental metrics data for purposes of assessing the impact of the EMS implementation at the Combined Facility.

a. Data To Be Collected. Defendants shall document each incident that (1) involves a release of a hazardous or extremely hazardous substance into the environment in an amount that equals or exceeds a reportable quantity (“RQ”) established by a federal or State agency; or (2) results in a release or discharge from a permitted or authorized emission or discharge point in excess of a permitted or otherwise authorized level.

b. Data Reporting. As part of the reporting due under Section VII (Reporting



Requirements) of this Consent Decree, Defendants shall submit, for EPA's information, the following information for the calendar year covered by such annual report: (1) total number of incidents, identified by type of incident specified in Subparagraph 43.a., for their respective facilities during each month, quarter, and year; and (2) the date of each incident.

D. Reports Submittal and Approval Process for Injunctive Relief

44. After review of any plan, report, or other item that is required to be submitted for EPA's review and approval pursuant to this Consent Decree, Defendants shall in writing obtain: a) an approved submission; b) an approved submission with specified conditions; c) an approval in part of the submission and a disapproval in part; or d) a disapproved submission with instruction for resubmission.

45. If the submission is approved pursuant to Paragraph 44.a., Defendants shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 44.b. or c., Defendants shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to Defendants' right to dispute only the specified conditions or the disapproved portions, under Section X of this Decree (Dispute Resolution).

46. If the submission is disapproved in whole or in part pursuant to Paragraph 44.c. or d., Defendants shall, within forty-five (45) Days correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the

preceding Paragraphs. If the resubmission is approved in whole or in part, Defendants shall proceed in accordance with the preceding Paragraph.

47. Any stipulated penalties applicable to the original submission, as provided in Section VIII of this Decree, shall accrue during the forty-five (45) Day period but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendants' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

48. If a resubmitted plan, report, other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendants to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Defendants' right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.

49. Permits and State Program. Where any compliance obligation under this Section requires Defendants to obtain a federal, state, or local permit or approval, Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendants may seek relief under the provisions of Section IX of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendants have submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

**VI. SUPPLEMENTAL ENVIRONMENTAL PROJECTS**

50. Shintech shall implement three (3) Supplemental Environmental Projects (“SEPs”), in accordance with all provisions of this Section VI, as described below.

51. Green Buffers SEP. Shintech shall purchase and transfer or cause to be purchased and transferred in fee simple to the United States Department of Interior, Fish and Wildlife Service (“United States Fish and Wildlife Service”) at least 300 acres of bottomland hardwood forests and associated wetlands in the Austin’s Woods (also known as the Colombia Bottomlands Project area) that are acceptable in the sole discretion of the United States Fish and Wildlife Service. The United States Fish and Wildlife Service intends to add the land to the San Bernard National Wildlife Refuge. The transfer shall be carried out in accordance with, and the deed and title evidence (including final title evidence) shall be prepared in accordance with, the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 3111.

a. Within thirty (30) Days after Shintech receives notice that this Consent Decree has been lodged, Shintech shall deposit the amount of \$1,000,000 into an escrow account. If the Decree is not entered by the District Court, the monies placed in escrow, together with any interest thereon, shall be returned to Shintech. If the Decree is entered by the District Court, Shintech shall, within thirty (30) Days thereof, continue with the process of implementing the Green Buffer SEP.

b. Shintech shall spend at least \$1,000,000 on the Green Buffer SEP, including reasonable costs and fees associated with the purchase and transfer of real property to the United States Fish and Wildlife Service.



c. No later than two years after the Effective Date of this Consent Decree, Shintech shall complete the SEP by (i) ensuring that the final title insurance policy (or other final evidence of title acceptable to the United States Fish and Wildlife Service) and the deed in fee simple title (in a form acceptable to the United States Fish and Wildlife Services) are provided to the United States Fish and Wildlife Services and (ii) providing copies of the same to the EPA and the United States Department of Justice in accordance with Section XIV (Notices). Shintech understands that it can take up to twelve months after closing for a final title insurance policy to be issued.

52. Refrigerant/Appliance Recycling Program SEP. Shintech shall create and implement, or cause a contractor to create and implement, a program that recycles residential, refrigerant-containing appliances in the City of Houston, Texas in accordance with all provisions of Section VI and Appendix B of this Consent Decree. Shintech shall, in accordance with all applicable laws and regulations, directly, or through its contractor, collect and accept residential appliances containing ODS; recycle or dispose of the ODS, all hazardous substances, and all durable components of the appliances; and recycle and/or destroy all ODS-containing foam insulation. The SEP shall have been satisfactorily completed (A) when the program has operated for at least two (2) years, Shintech has spent no less than \$1,000,000 on this SEP, Shintech has periodically advertised the program throughout the City of Houston for at least two (2) years, and Shintech has collected no less than 6,400 residential appliances containing ODS ("the Clause A definition of success"), or (B) when the United States determines pursuant to this Paragraph that the SEP may be terminated. The Parties recognize that whether the program can meet the "Clause A definition of success" depends in part on the response of the public and that it may be

appropriate to terminate the SEP if the public does not respond. As a result, in addition to the annual reports required by Section VII of this Consent Decree, Shintech shall submit to the United States, for review and approval, a report on the status of the project not later than 6 months after the Effective Date of this Consent Decree, and may, at any time thereafter submit additional status reports on the SEP, and shall, if requested by EPA, submit additional status reports on the SEP. If Shintech concludes that, despite its best efforts to implement the SEP and its compliance with this Paragraph 52 and Appendix B, the program cannot achieve the "Clause A definition of success" because the public is not responding, Shintech may in conjunction with a status report, request to terminate the project. A request to terminate the SEP shall certify that Shintech has complied with this Paragraph 52 and Appendix B, and provide all data relevant to the performance of the SEP to the date of the request. If the United States agrees that, despite Shintech's best efforts to implement the SEP and its compliance with this Paragraph 52 and Appendix B, the "Clause A definition of success" cannot be met because the public is not responding, then Shintech shall pay to the United States Treasury, within 30 days of receiving the United States' determination, the difference between \$1.0 million and the net amount of eligible SEP costs incurred by Shintech. Regardless of whether Shintech has made a request to terminate the project, if the United States, at any time, determines that the program cannot achieve the "Clause A definition of success," Shintech shall pay to the United States Treasury, within 30 days of receiving the United States' determination, the difference between \$1.0 million and the net amount of eligible SEP costs incurred by Shintech.

53. The Polyvinyl Chloride Slurry Strippers SEP. Polyvinyl Chloride ("PVC") slurry strippers are used to remove residual vinyl chloride monomer ("RVCM") from the PVC slurry

prior to the drying process. Shintech shall complete the Polyvinyl Chloride Strippers SEP in accordance with all provisions of Section VI and Appendix C of this Consent Decree and shall spend no less than \$2,700,000 to perform the Polyvinyl Chloride Slurry Stripper SEP. Shintech shall retrofit five (5) of its PVC slurry strippers, which includes the replacement of the stripper trays. No later than sixty (60) Days after Completion of Construction for this SEP, Shintech shall meet a RVC limit of 10 ppmw (weighted, 12-month rolling average for all plants). The RVC limits shall be calculated in accordance with Shintech's PSD Permit (Permit Number 9347 and PSD-TX-285MD). As soon as practicable, but in no event later than sixty (60) days after Shintech can certify Completion of Construction for this SEP, Shintech shall submit an appropriate application to the TCEQ to incorporate the Shintech-Facility-specific requirements of 10 ppmw RVC limit into a federally enforceable non-Title V Permit that will ensure that the requirements survive the termination of this Consent Decree. Upon issuance of such permit or in conjunction with such permitting, Shintech shall file all necessary applications to incorporate the requirements of that permit into the applicable Title V Permit.

- a. As used in this Paragraph, "ppmw" means parts per million by weight.
- b. "Completion of Construction" for purposes of this Paragraph shall mean the time that all upgrades (retrofits) have been made to the five (5) PVC slurry strippers and the upgrade equipment is running at normal operating characteristics and conditions.
- c. Shintech agrees that the incorporation of any requirement of this Consent Decree into its Title V Permit will be in accordance with all applicable laws and regulations.

54. Shintech is responsible for the satisfactory completion of the SEPs in accordance with the requirements of this Decree. For Purposes of the SEPs described in this Consent Decree

“satisfactory completion” means completing the projects as described in this Decree and spending at least the minimum expenditure specified for each project. Shintech may use contractors or consultants in planning and implementing the SEPs.

55. With regard to each SEP, Shintech shall certify the truth and accuracy of each of the following:

- a. that all cost information provided to EPA in connection with EPA’s approval of the SEP is complete and accurate and that Shintech in good faith estimates that the cost to implement each SEP is as stated in Paragraphs 51 through 53 of this Consent Decree;
- b. that, as of the date of executing this Decree, Shintech is not required to perform or develop the SEP by any federal, State, or local law or regulation and is not required to perform or develop the SEPs by agreement, grant, or as injunctive relief awarded in any other action in any forum;
- c. that the SEPs are not projects that Shintech was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree;
- d. that Shintech has not received and will not receive credit for the SEPs in any other enforcement action;
- e. that Shintech will not receive any reimbursement for any portion of the SEPs from any other person; and
- f. that for Federal income tax purposes, Shintech agrees that it will neither capitalize into the inventory or basis nor deduct any costs or expenditures incurred in performing the SEPs herein described.

56. SEP Completion Report. Within 30 Days after the date set for completion of each SEP, Shintech shall submit the respective SEP Completion Report to the United States and to the EPA, in accordance with Section XIV of this Consent Decree (Notices). Each SEP Completion Report shall contain the following information:

- a. a detailed description of the SEP as implemented;
- b. a description of any problems encountered in completing the SEP and the solutions thereto;
- c. an itemized list of all eligible SEP costs expended;
- d. a certification that each SEP has been fully implemented pursuant to the provisions of this Consent Decree; and
- e. a description of the environmental and public health benefits resulting from implementation of each SEP (with a quantification of the benefits and pollutant reductions, if feasible).

57. EPA may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to evaluate each SEP Completion Report.

58. After receiving each SEP Completion Report, the United States shall notify Shintech whether or not Shintech has satisfactorily completed the SEP. If Shintech has not completed each SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section VIII of this Consent Decree.

59. Disputes concerning the satisfactory performance of each SEP, other than the acceptability of the acreage in the Green Buffer SEP, whether the Refrigerant/Appliance Recycling Program SEP can be terminated, and the amount of eligible SEP costs, may be



resolved under Section X of this Decree (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.

60. Each submission required under this Section shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 65.

61. Any public statement, oral or written, in print, film, or other media, made by Shintech making reference to any of the SEPs under this Consent Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, *United States v. Shintech Incorporated and K-Bin Inc.*, taken on behalf of the U.S. Environmental Protection Agency under federal environmental laws.

#### **VII. REPORTING REQUIREMENTS**

62. Beginning no later than thirty (30) Days after the end of calendar-year 2008 and continuing until termination of this Decree pursuant to Section XVII, Defendants shall submit to EPA, on an annual basis, reports for the preceding calendar year that shall include:

- a. information on all industrial process refrigeration equipment that were replaced or retrofitted;
- b. documentation to support Shintech's implementation of the RCRA Tracking Plan and Shintech's compliance with 40 C.F.R. Part 262 and 40 C.F.R. Part 82;
- c. Shintech's findings under its RCRA Third-Party Audit, the actions taken to correct the identified deficiencies, if any, and Shintech's return to full compliance;
- d. the results of the studies and plans, if any, implemented by Shintech to determine whether or not there has been a release on or from the Shintech Facility and the measures taken by Shintech to mitigate and/or remediate the migrations, if any;

e. where applicable, information on the operations, closure, and/or construction of the Drying Beds, Surface Impoundment II, and the installation of the Waste Decomposition Tank, including the completion of any requirements and a summary of costs incurred since the previous report;

f. information on the status of each SEP that is described in Section VI of this Decree, a narrative description of the activities undertaken, the status of any construction or compliance measures, including the completion of any milestones, and a summary of costs incurred since the previous report; and

g. a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If Defendant(s) violate, or have reason to believe that they may violate, any requirement of this Consent Decree, Defendant(s) shall notify the United States of such violation and its likely duration, in writing, within ten (10) working Days of the Day Defendant(s) first become aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant(s) shall so state in the report. Defendant(s) shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant(s) become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant(s) of their obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

63. Whenever any violation of this Consent Decree or any other event affecting Defendants' performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendants shall notify EPA Region 6 orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant(s) first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

64. All reports shall be submitted to the persons designated in Section XIV of this Consent Decree (Notices).

65. Each report submitted by Defendant(s) under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

66. The reporting requirements of this Consent Decree do not relieve Defendants of any reporting obligations required by the Acts or implementing regulations, or by any other federal, State, or local law, regulation, permit, or other requirement.



67. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

### **VIII. STIPULATED PENALTIES**

68. Defendants shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

69. Late Payment of Civil Penalty. If Defendants fail to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendants shall pay a stipulated penalty of \$2,000 per Day for each Day that the payment is late.

70. Compliance Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements of Paragraphs 11 through 49 of this Consent Decree.

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
<u>\$2,500</u>	1st through 14th Day
<u>\$3,000</u>	15th through 30th Day
<u>\$4,000</u>	31st Day and beyond

71. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VII of this Consent Decree:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
<u>\$750</u>	1st through 14th Day
<u>\$1,000</u>	15th through 30th Day
<u>\$1,250</u>	31st Day and beyond

72. SEP Compliance. If Shintech fails to satisfactorily complete each SEP by the deadline set forth in Paragraphs 51 through 53 and as is set forth Appendix B and C of this Consent Decree, Shintech shall pay stipulated penalties for each day for which it fails to satisfactorily complete each SEP, as follows:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
<u>\$2,500</u>	1st through 14th day
<u>\$3,000</u>	15th through 30th day
<u>\$4,000</u>	31st day and beyond

a. If Shintech fails to implement the Green Buffer SEP, or halts or abandons work on the Green Buffer SEP, Shintech shall pay a stipulated penalty of \$1,000,000, together with interest accruing from the date on which the Consent Decree is lodged with the Court. The penalty under this subparagraph shall accrue as of the date six (6) months after the date performance ceases.

b. If Shintech fails to implement the Refrigerant/Appliance Recycling Program SEP, or halts or abandons work on the Refrigerant/Appliance Recycling Program SEP,

Shintech shall pay a stipulated penalty of \$1,000,000, together with interest accruing from the date on which the Consent Decree is lodged with the Court, provided that, if Shintech terminated the SEP with the approval of the United States pursuant to Paragraph 52 of this Consent Decree and has paid any sum due under Paragraph 52, no penalty shall be due under this Subparagraph. The penalty under this subparagraph shall accrue as of the date six (6) months after the date performance ceases.

c. If Shintech fails to implement the Polyvinyl Chloride Slurry Stripper SEP, or halts or abandons work on the Polyvinyl Chloride Slurry Stripper SEP, Shintech shall pay a stipulated penalty of \$2,000,000, together with interest accruing from the date on which the Consent Decree is lodged with the Court. The penalty under this subparagraph shall accrue as of the date as of the date six (6) months after the date performance ceases.

d. If the United States demands and Shintech pays a stipulated penalty under Subparagraphs 72.a., b., or c. (abandonment) in connection with a SEP, the amount of stipulated penalties also due under the main text of Paragraph 72 (unsatisfactory completion) in connection with the same SEP shall not exceed a six (6) months total calculated pursuant to the main text of Paragraph 72.

e. If Shintech fails to comply with the interim dates set forth in Section VI and as is incorporated by reference in Appendix B and C of this Consent Decree for implementing the SEPs, Shintech shall pay stipulated penalties for each failure to meet an applicable deadline, as follows:

Penalty Per Violation Per Day

\$1,000

Period of Noncompliance

1st through 14th day

\$2,000	15th through 30th day
\$3,000	31st day and beyond

73. Except as provided in Paragraph 72a., b., and c. above, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree. Defendants shall pay any stipulated penalty within thirty (30) Days of receiving the United States' written demand.

74. The United States, may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

75. Stipulated penalties shall continue to accrue as provided in Paragraph 73, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Defendants shall pay accrued penalties determined to be owing, together with interest, to the United States within thirty (30) Days of the effective date of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendants shall pay all accrued penalties determined by the Court to be owing, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in Subparagraph c., below; and

c. If any Party appeals the District Court's decision, Defendants shall, as

determined by the Court, pay all accrued penalties owed together with interest, within fifteen (15) Days of receiving the final appellate court decision.

76. Obligations Prior to the Effective Date. Upon the Effective Date of this Consent Decree, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Paragraphs 11 through 49 and Paragraph 51 that have occurred after the date on which the Consent Decree is lodged with the Court and prior to the Effective Date of the Consent Decree, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

77. Defendants shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 9, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

78. If Defendants fail to pay stipulated penalties according to the terms of this Consent Decree, Defendants shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendants' failure to pay any stipulated penalties.

79. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendants' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Acts or implementing regulations, Defendants shall be

allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

#### **IX. FORCE MAJEURE**

80. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendants, or any entity controlled by Defendants, or of Defendants' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendants' best efforts to fulfill the obligation. The requirement that Defendants exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

81. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendants shall provide notice orally or by electronic or facsimile transmission to the EPA, within 72 hours of when Defendants first knew that the event might cause a delay. Within seven (7) Days thereafter, Defendants shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendants' rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendants, such event may cause or contribute to an endangerment to public



health, welfare or the environment. Defendants shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Defendants from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendants shall be deemed to know of any circumstance of which Defendants, any entity controlled by Defendants, or Defendants' contractors knew or should have known.

82. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

83. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendants in writing of its decision.

84. If Defendants elect to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), they shall do so no later than fifteen (15) Days after receipt of EPA's notice. In any such proceeding, Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the

effects of the delay, and that Defendants complied with the requirements of Paragraphs 80 and 81, above. If Defendants carry this burden, the delay at issue shall be deemed not to be a violation by Defendants of the affected obligation of this Consent Decree identified to EPA and the Court.

#### **X. DISPUTE RESOLUTION**

85. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendants' failure to seek resolution of a dispute under this Section shall preclude Defendants from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendants arising under this Decree.

86. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendants send the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within fifteen (15) Days after the conclusion of the informal negotiation period, Defendants invoke formal dispute resolution procedures as set forth below.

87. Formal Dispute Resolution. Defendants shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position

shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendants' position and any supporting documentation relied upon by Defendants.

88. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of Defendants' Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Defendants, unless Defendants file a motion for judicial review of the dispute in accordance with the following Paragraph.

89. Defendants may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIV of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendants' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

90. The United States shall respond to Defendants' motion within the time period allowed by the Local Rules of this Court. Defendants may file a reply memorandum, to the extent permitted by the Local Rules.

91. Standard of Review: Disputes Concerning Matters Accorded Record Review.  
Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 87 pertaining to the adequacy of the performance of work undertaken pursuant to this Consent

Decree or pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by EPA under this Consent Decree, and in all other disputes brought under Paragraph 87 that are accorded review on the administrative record under applicable principles of administrative law, Defendants shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

a. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 87, Defendants shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

92. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendants under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 75. If Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties).

#### **XI. INFORMATION COLLECTION AND RETENTION**

93. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Combined Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendants or their representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendants' compliance with this Consent Decree.

94. Upon request, Defendants shall provide EPA or its authorized representatives splits of any samples taken by Defendants. Upon request, EPA shall provide Defendants splits of any samples taken by EPA.

95. Until five years after the termination of this Consent Decree, Defendants shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendants' performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendants shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

96. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendants shall notify the United States at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the



preceding Paragraph and, upon request by the United States, Defendants shall deliver any such documents, records, or other information to EPA. Defendants may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendants assert such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Defendants. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

97. Defendants may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendants seek to protect as CBI, Defendants shall follow the procedures set forth in 40 C.F.R. Part 2.

98. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendants to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

## **XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS**

99. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging.



100. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 99. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Acts or implementing regulations, or under other federal or State laws, regulations, or permit conditions, except as expressly specified in Paragraph 99. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Combined Facility, whether related to the violations addressed in this Consent Decree or otherwise.

101. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Shintech Facility and/or the K-BIN Facility or Defendants' violations, Defendant(s) shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 99 of this Section.

102. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendants are responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendants' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein.

The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Defendants' compliance with any aspect of this Consent Decree will result in compliance with provisions of the Acts or with any other provisions of federal, State, or local laws, regulations, or permits.

103. This Consent Decree does not limit or affect the rights of Defendants or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendants, except as otherwise provided by law.

104. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

### **XIII. COSTS**

105. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendants.

### **XIV. NOTICES**

106. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

**To the EPA:**

Associate Director, Hazardous Waste Enforcement Branch (6EN-H)  
Compliance Assurance and Enforcement Division  
U.S. Environmental Protection Agency, Region 6

1445 Ross Avenue, Suite 1200  
Dallas, TX 75202

Timothy J. Sullivan  
Special Litigation and Project Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW (MC 2248A)  
Washington, D.C. 20460

To the United States – to “EPA” as indicated above and:

Chief, Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
Box 7611 Ben Franklin Station  
Washington, D.C. 20044-7611  
Re: DOJ No. 90-5-2-1-08745/1

and

To Defendants:

Shintech Incorporated  
5618 Highway 332 East  
Freeport, TX 77541  
Attn: Plant Manager

With a copy to:

W. David Tidholm  
Porter & Hedges, L.L.P.  
1000 Main Street, 36<sup>th</sup> Floor  
Houston, TX 77002

107. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

108. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties

in writing.

#### **XV. EFFECTIVE DATE**

109. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Defendants hereby agree that they shall be bound to perform duties scheduled herein to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

#### **XVI. RETENTION OF JURISDICTION**

110. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X and XVII, or effectuating or enforcing compliance with the terms of this Decree.

#### **XVII. MODIFICATION**

111. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

112. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 91, the Party seeking the modification bears the burden of

demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

#### **XVIII. TERMINATION**

113. Anytime after five (5) years after the Effective Date of the Consent Decree, Defendants may serve upon the United States a Request for Termination, together with all necessary supporting documentation, certifying that Defendants have completed the requirements of Section V (Compliance Requirements) of this Decree, have complied with all other requirements of this Consent Decree, including those relating to the SEPs required by Section VI of this Consent Decree, and have paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree.

114. Following receipt by the United States of Defendants' Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendants have satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

115. If the United States does not agree that the Decree may be terminated, Defendants may invoke Dispute Resolution under Section X of this Decree. However, Defendants shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 87 of Section X, until sixty (60) Days after service of their Request for Termination.

#### **XIX. PUBLIC PARTICIPATION**

116. This Consent Decree shall be lodged with the Court for a period of not less than

thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendants consent to the entry of this Consent Decree without further notice and agree not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendants in writing that it no longer supports entry of the Decree.

#### **XX. SIGNATORIES/SERVICE**

117. Each undersigned representative of Defendants and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

118. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendants agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### **XXI. INTEGRATION**

119. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supercedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and



approved pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

**XXII. FINAL JUDGMENT**

120. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Defendants.

**XXIII. APPENDICES**

121. The following appendices are attached to and part of this Consent Decree:

“Appendix A” is the EMS STANDARD;

“Appendix B” is the Scope of Work for the Refrigerant/Appliance Recycling Program SEP;

“Appendix C” is the Scope of Work for the Polyvinyl Chloride Slurry Strippers SEP; and

“Appendix D” is the Site Plan for the Shintech Facility, which illustrates the locations of the Drying Beds and Surface Impoundments I and II.

Dated and entered this \_\_\_ day of \_\_\_\_\_, 2008.

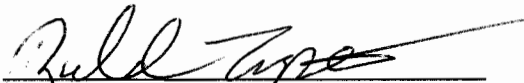
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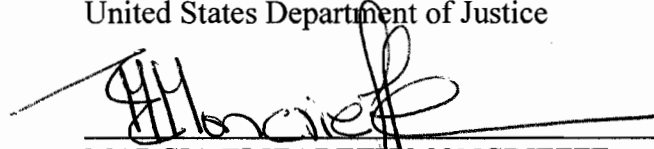
UNITED STATES DISTRICT JUDGE  
Southern District of Texas

U.S. v. SHINTECH INCORPORATED and K-BIN INC.

WE HEREBY CONSENT to the entry of this Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF, UNITED STATES OF AMERICA:**

  
RONALD J. TENPAS  
Assistant Attorney General  
Environment and Natural Resources Division  
United States Department of Justice

  
MARCIA ELIZABETH MONCRIEFFE  
Special Counsel  
Environment and Natural Resources Division  
Environmental Enforcement Section  
United States Department of Justice  
c/o United States Environmental  
Protection Agency  
Office of Regional Counsel (6RC-EW)  
1445 Ross Ave.  
Dallas, TX 75202-2733  
(214) 665-7343

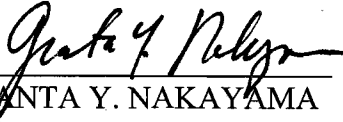
TIM JOHNSON  
Acting United States Attorney  
Southern District of Texas

KEITH WYATT  
Assistant United States Attorney  
State Bar of Texas No. 22092900  
Federal Bar No. 3480  
P.O. Box 61129  
919 Milam Street  
Houston, TX 77208

U.S. v. SHINTECH INCORPORATED and K-BIN INC.

WE HEREBY CONSENT to the entry of this Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF UNITED STATES OF AMERICA (con't):**



GRANTA Y. NAKAYAMA  
Assistant Administrator  
Office of Enforcement and Compliance  
Assurance  
U.S. Environmental Protection Agency

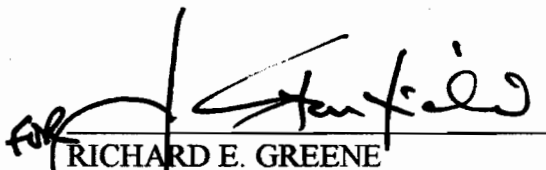
**OF COUNSEL FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY**

TIMOTHY J. SULLIVAN  
Special Litigation and Projects Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, NW (MC 2248A)  
Washington, D.C. 20460

U.S. v. SHINTECH INCORPORATED and K-BIN INC.

WE HEREBY CONSENT to the entry of this Consent Decree, subject to the public notice and comment provisions of 28 C.F.R. § 50.7:

**FOR PLAINTIFF, UNITED STATES OF AMERICA (con't):**

A handwritten signature in black ink, appearing to read "R. E. Greene", is written over a horizontal line. To the left of the signature, the word "for" is written in a cursive script.

RICHARD E. GREENE  
Regional Administrator  
Region 6  
1445 Ross Ave, Suite 1200  
Dallas, TX 75202

**U.S. v. SHINTECH INCORPORATED and K-BIN INC.**

WE HEREBY CONSENT to the entry of this Consent Decree:

**FOR DEFENDANTS, SHINTECH INCORPORATED and K-BIN INC:**



\_\_\_\_\_  
W. DAVID TIDHOLM  
Porter & Hedges LLP  
1000 Main Street, 36<sup>th</sup> Fl.  
Houston, TX 77002

9/4/08

\_\_\_\_\_  
DATE

U.S. v. SHINTECH INCORPORATED and K-BIN INC.

## **APPENDIX A**

### **ENVIRONMENTAL MANAGEMENT SYSTEM ("EMS") STANDARD**

#### **I. SCOPE AND APPLICATION**

1. **SCOPE:** This standard defines the environmental management system that must be in place to ensure that the Defendants operate in accordance with all applicable laws and regulations.

2. **FIELD OF APPLICATION:** This standard applies to the Shintech Facility in all respects and to the K-BIN Facility with respect to its industrial process refrigeration equipment operations.

#### **II. REFERENCES**

3. **LAWS AND REGULATIONS:** All applicable environmental laws and regulations with respect to the Shintech Facility and all environmental laws and regulations with respect to industrial process refrigeration equipment operations at the K-BIN Facility.

#### **III. DEFINITIONS**

4. **COMMITMENT:** A commitment made to regulatory authorities requiring process modifications or the expenditure of company resources.

5. **RELEASE:** Any emission, spill, discharge or disposal to the air, land, or water, of any pollutant or contaminant, whether routine or accidental, at or from the Shintech Facility. Any emission, spill, discharge or disposal to the air, land, or water, of any pollutant or contaminant, whether routine or accidental, from K-BIN's industrial process refrigeration equipment operations.



6. **REMEDIATION:** The multi-phase process which ensures timely, cost-effective, and environmentally-sound response to an affected location.

#### **IV. REQUIREMENTS**

7. **MANAGEMENT COMMITMENT:**

a. A policy statement confirming commitment to environmental compliance and continuous improvement has been issued, publicized to employees, and made available to the public.

b. Systems are in place to inform Defendants' employees and contractors of their environmental policies and procedures, which ensure compliance with applicable laws and regulations.

c. A system is in place to identify and supply the resources necessary to achieve compliance.

8. **TRAINING:** Systems are in place to ensure that Shintech's employees are trained to recognize and understand duties for their respective area(s) of responsibility, and that K-BIN's employees are trained to recognize and understand duties for their respective area(s) of responsibility, including environmental impact and liabilities from its industrial process refrigeration equipment operations.

9. **INCIDENT REPORTING, INVESTIGATION, AND CORRECTIVE ACTION:**

a. A system shall be in place for reporting and investigating all releases.

b. A system shall be implemented for addressing and documenting the closure of all corrective actions identified by investigations.

10. **COMPLIANCE MANAGEMENT PROCESS – DETERMINATION OF APPLICABILITY:** A system is in place that identifies and documents the applicability of laws, regulations, permit conditions, and commitment for the Shintech Facility and a system is in place that identifies and documents the applicability of laws, regulations, permit conditions, and commitment to K-BIN's industrial process refrigeration equipment operations.

11. **IDENTIFICATION AND COMMUNICATION OF REQUIREMENTS:**

- a. A system is in place to identify the applicability of laws and regulations and assign responsibility for compliance.
- b. A system is in place to formally communicate duties to responsible individuals.
- c. A system is in place to ensure consistent interpretation of applicable laws and regulations.

12. **PROCEDURES:**

- a. Procedures shall be developed and communicated, to include environmental, operating, maintenance, and inspection procedures.
- b. Environmental critical equipment and effective environmental and maintenance processes shall be identified and incorporated into applicable operations, maintenance, and inspection procedures.
- c. A process for developing, approving, and implementing procedures shall be implemented.

13. **DETERMINATION OF COMPLIANCE STATUS:**

- a. A system is in place to determine, on a periodic basis, the compliance

status of the Shintech Facility with applicable laws and regulations, and a system is in place to determine the compliance status of the K-BIN Facility with laws and regulations applicable to its industrial process refrigeration equipment operations.

b. The compliance status of Defendants' respective facilities is reviewed with management as appropriate.

14. **CORRECTIVE ACTION:** A system is in place to ensure that appropriate action is taken in response to identified non-compliance conditions or conditions which represent unacceptable business risk. The system will ensure prompt communication and coordination with appropriate management groups for resolution.

15. **MANAGEMENT OF CHANGE:**

a. A system is in place to identify changes in applicable laws and regulations that impact the Combined Facility. The impacts of the changes will be assessed and incorporated into the compliance management process as necessary.

b. A system is in place to determine applicable environmental laws and regulations and company standards for changes at the Combined Facility.

c. The impact on the community from Shintech's construction and operations and from K-BIN's industrial process refrigeration system construction and operations shall be considered in site selection and plant layout and major plant modifications

d. Significant new releases or significant changes to Shintech's release inventory are identified and evaluated according to Paragraph 16 of this Appendix (Release Inventory). Significant new releases or significant changes to K-BIN's industrial process refrigeration equipment operations release inventory are identified and evaluated according to

Paragraph 16 of this Appendix (Release Inventory).

e. A system is in place to ensure that pollution prevention practices and environmental stewardship are incorporated into the design and operation of projects at or on the Shintech Facility, and industrial process refrigeration projects at the K-BIN Facility at the earliest stage of development or engineering.

f. A system is in place to verify and document that changes to the Shintech Facility and changes to the industrial process refrigeration equipment operations at the K-BIN Facility comply with applicable laws, regulations, permit application representations, and company standards prior to operation.

16. RELEASE INVENTORY:

a. A release inventory is established at the Shintech Facility and a release inventory is established for releases from K-BIN's industrial process refrigeration equipment operations. This inventory shall be updated at least annually.

b. The environmental, health and safety effects of releases at the Shintech Facility and releases from K-Bin's industrial process refrigeration equipment operations are evaluated. The evaluation is updated as appropriate.

17. WASTE MANAGEMENT:

a. Defendants shall, prior to initial use and on a periodic basis, audit its chosen treatment, storage or disposal ("TSD") facilities for compliance with all applicable laws and regulations.

b. Defendants shall review as appropriate written agreements with waste transporters and TSDs to ensure compliance with applicable laws and regulations and for

technical acceptability.

18. REMEDIATION:

- a. A system is in place to identify on-site and off-site remediation liabilities for a release.
- b. Remediation activities caused by a release are incorporated into the compliance management process.

**V. REPORTS AND RECORDKEEPING**

19. REPORTS AND RECORDKEEPING:

- a. Shintech shall maintain a release inventory for releases from the Shintech Facility and a release inventory for releases from K-Bin's industrial process refrigeration equipment operations.
- b. Shintech shall maintain a waste generation inventory for the Shintech Facility and a waste generation inventory for releases from K-Bin's industrial process refrigeration equipment operations.
- c. Shintech shall maintain documentation of the applicability of environmental laws, regulations and permit conditions for the Shintech Facility and documentation of the applicability of environmental laws, regulations and permit conditions regarding K-Bin's industrial process refrigeration equipment operations.

## **APPENDIX B**

### **CFC RECYCLING SEP ("Program")**

1. The Program will consist of a leased facility in the City of Houston, together with personnel and vehicles to assist in the collection of residential, refrigerant containing appliances ("appliances") from residents of the City of Houston (the "City" or "Houston").

2. All activities may be performed by a contractor selected by Shintech, who will work with the City to achieve the Program's goals.

3. Shintech will commit not less than \$1,000,000 in funding for the Program, which may be used for rent, salaries, equipment, collection, recovery and recycling costs for the Program.

4. Shintech shall cause the facility to be equipped with a call center to receive calls from Houston residents and schedule at-home collections of appliances.

5. The City of Houston will be advised of the Program's availability and will be encouraged to refer all inquiries to the call center. If permitted by the City, details of the Program will be included in an insert to the City water bills mailed to not less than 200,000 residents.

6. The Program will be advertised to Houston's residents through appropriate channels. Some distribution channels may include mailbox drops, door hangers, trade shows and Earth Day events. Reasonable costs associated with this marketing will be authorized expenses of the Program.

7. The Program shall have at least two 24-foot trucks with lift gates to collect



appliances at residents' homes on a daily basis. Appointments will be available six days per week, Monday through Saturday. The Program will also provide collection services at the City's six (6) area appliance drop-off locations.

8. Shintech shall cause a recycling operation to be established at a leased facility in accordance with all local, State and federal laws and regulations. The facility will be equipped with a Stage I, state-of-the-art refrigerator recycling system developed in Germany by SEG Umwelt Services. Shintech shall ensure that it, or any contractor retained by Shintech to carry out this SEP, has access to such a system, which may be patented.

9. All appliances collected under the Program will be processed in an environmentally proper manner and in compliance with the EPA Responsible Appliance Disposal ("RED") Program criteria.

10. Shintech will collect and recycle, or cause any contractor Shintech retains to carry out this Program, to collect and recycle, at least 6,400 appliances within two years after startup.

11. Shintech will maintain, or cause any contractor Shintech retains to carryout this Program to maintain, a database with all participating resident information and material separation data on a per-unit basis. Beginning with the second annual report due under Section VII ("Reporting Requirements") of this Consent Decree, Shintech shall submit annual reports to the EPA verifying the amount of appliances and materials that have been recycled or destroyed in the previous year.

12. The eligible costs of the Program include all costs of destruction for any hazardous materials and polyurethane foam insulation containing CFC-11 or HCFC-141b.

## **APPENDIX C**

### **POLYVINYL CHLORIDE SLURRY STRIPPER SEP**

#### **I. STRIPPER REFURBISHMENT SCHEDULE**

1. Shintech will replace the trays in CL-3451 A, B, and C, which are located in what Shintech has identified as its plant 3,<sup>2</sup> by no later than June 1, 2010.
2. Shintech will provide EPA with documentation evidencing completion of this phase of the Slurry Stripper SEP by no later than July 1, 2010.
3. Shintech will replace the trays in CL-451 E and F, both in plant 1, by no later than June 1, 2011.
4. Shintech will provide EPA with documentation evidencing completion of this phase of the Slurry Stripper SEP by no later than July 1, 2011.

#### **II. IMPLEMENTATION AND SUBMITTAL REQUIREMENTS**

1. Shintech shall commence implementation of this SEP within 60 days after the Effective Date of this Consent Decree.
2. Shintech shall submit biannual SEP performance data to the EPA on the RVCM emissions for the first three (3) years after Completion of Construction.

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<sup>2</sup> The Shintech Facility consist of three (3) PVC resin plants, identified by Shintech as plants 1, 2, and 3.

